6280/4 FAC

SUBJECT: VOLATILE ORGANIC CHEMICALS (VOC) IN THE CAMP LEJEUNE WATER SUPPLY

INTRODUCTION: This staff study addresses the supply of adequate water to Tarawa Terrace (TT), and the mid- and long-term responses to the subject.

1. PROBLEM:

- To provide adequate, non-contaminated water supply to TT to meet the summertime demand.
- To develop milestones for the VOC study and interim and long-term alternatives.

2. ASSUMPTIONS:

- None.

3. FACTS BEARING ON THE PROBLEM:

- With the two wells closed at TT (#26 and new well), a water supply shortage of about 300,000 gallons per day is expected this summer.
- Annex A provides analytical data on the Tarawa Terrace (TT) water system. These data indicate no detectable VOC concentrations in the finished water without the TT new well in operation.
- Annex A also indicates that detectable levels of tetrachloroethylene (tetraCE) in the TT finished water would likely occur when the TT new well is operated and blended with other TT wells. The levels of the tetraCE in the finished water can only be estimated as between detectable levels 10 ppb and 20 ppb.

 Interestingly, the only parameter of significance appears CLW tetraCE in the new well.
 - Annex A provides the alternative for providing water to the

TT area and recommended construction of an 8" line from Brewster Blvd to TT (cost estimate: \$90,000).

- Completion of this auxiliary line is anticipated in June 1985, if approved.
- Annex C describes the issues which must be addressed to develop the mid- and long-term responses to the VOC problem.

 Milestones for the completion of the NACIP study are requested in order for the CG, MCB: to properly plan future responses and make decisions on courses of action.
- Annex D provides the results of our search for VOC standards among states and other agencies.

DISCUSSION:

- auxiliary raw water line to the TT system. Further, the data suggests interim use of the TT new well for contingency purposes would not pose any extreme health threat to the TT residents. Production for any duration should only be pursued following additional analyses of the "diluted" VOC concentrations in the finished water and review of these data by medical personnel.
- Construction of the 8" line offers future economic advantages in return of raw water from TT wells at a minimal cost Even with the approval to proceed with the 8" line, the likelihoo exists for the use of the new well and/or water conservation measures (with associated public information issues) in order to 000000010 (

- Funding for both the NACIP confirmation study and any remedial actions will use pollution abatement funds managed by NAVFACENGCOM.
- At present there are no published or established VOC standards applicable to Camp Lejeune. HQMC (LFL) continues to pursue the search for state standards with EPA offices.

5. CONCLUSIONS:

- The TT new well would be relatively safe to use for contingency purposes with caveats stated above.
- The construction of the 8" line offers much greater benefits than costs.
- The detailed NACIP study of the water system needs to be expedited.

- No clear regulatory limits for VOCs exist at present and .
will be slow in coming.
6. ACTION RECOMMENDED:
a. Proceed with construction of 8" line to TT.
CS: ConcurNonconcur
CG: ApprovedDisapproved
b. Forward message in Annex C.
CS: ConcurNonconcur
CG: ApprovedDisapproved
c. Pursue definition of "acceptable" VOC levels in finished
water through HQMC, NAVHOSP and NAVFACENGCOM. CLW
CS: Conque
CG: ApprovedDisapproved